

FILE 'USPATFULL' ENTERED AT 12:28:15 ON 12 JUL 2003
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FILE COVERS 1971 TO PATENT PUBLICATION DATE: 10 Jul 2003 (20030710/PD)
FILE LAST UPDATED: 10 Jul 2003 (20030710/ED)
HIGHEST GRANTED PATENT NUMBER: US6591423
HIGHEST APPLICATION PUBLICATION NUMBER: US2003131392
CA INDEXING IS CURRENT THROUGH 10 Jul 2003 (20030710/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 10 Jul 2003 (20030710/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2003
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2003

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>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<
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>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<
```

This file contains CAS Registry Numbers for easy and accurate
substance identification.

```
=> s Ligninsulfonate or Ligninsulfonic(w)acid
    1904 LIGNINSULFONATE
    482 LIGNINSULFONATES
    2124 LIGNINSULFONATE
        (LIGNINSULFONATE OR LIGNINSULFONATES)
    1148 LIGNINSULFONIC
    661069 ACID
    379645 ACIDS
    678589 ACID
        (ACID OR ACIDS)
    1138 LIGNINSULFONIC(W)ACID
L1    3100 LIGNINSULFONATE OR LIGNINSULFONIC(W)ACID
```

```
=> s Ligninsulfonate(10a)Ligninsulfonic(w)acid
    1904 LIGNINSULFONATE
    482 LIGNINSULFONATES
    2124 LIGNINSULFONATE
        (LIGNINSULFONATE OR LIGNINSULFONATES)
    1148 LIGNINSULFONIC
    661069 ACID
    379645 ACIDS
    678589 ACID
        (ACID OR ACIDS)
L2    4 LIGNINSULFONATE(10A)LIGNINSULFONIC(W)ACID
```

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=> s 12 not py>=2001
    775848 PY>=2001
L3    4 L2 NOT PY>=2001
```

=> d ibib kwic 1-4

L3 ANSWER 1 OF 4 USPATFULL

ACCESSION NUMBER: 90:17349 USPATFULL
TITLE: Hydraulic cement composition
INVENTOR(S): Natsuume, Tadao, Tokyo, Japan
Kadono, Hiromitsu, Yokohama, Japan
Miki, Yoshiaki, Kawasaki, Japan
PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Tokyo, Japan (non-U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4906298		19900306
APPLICATION INFO.:	US 1988-228823		19880802 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1985-809867, filed on 17 Dec 1985, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1984-270323	19841221
	JP 1985-17427	19850131
	JP 1985-33367	19850221
	JP 1985-45840	19850308
	JP 1985-45841	19850308

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hearn, Brian E.
ASSISTANT EXAMINER: Griffis, Andrew
LEGAL REPRESENTATIVE: Sherman & Shalloway
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
LINE COUNT: 1005

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . high-molecular-weight polymer having a molecular weight of at
least 10,000, and not more than 2.5% by weight of sugars. These
ligninsulfonates can be obtained by treating an ordinary
ligninsulfonic acid-containing liquid by a known
method, for example an ultrafiltration method utilizing a semi-permeable
membrane.

L3 ANSWER 2 OF 4 USPATFULL

ACCESSION NUMBER: 89:2784 USPATFULL
TITLE: Electroplated composite of zinc and organic polymer
INVENTOR(S): Yamamoto, Yuzo, Wakayama, Japan
Nagamori, Hiroyuki, Utsunomiya, Japan
Kitazawa, Kozo, Wakayama, Japan
PATENT ASSIGNEE(S): Kao Corporation, Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4797183		19890110
APPLICATION INFO.:	US 1987-107368		19871009 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1986-247093	19861017
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Tufariello, T. M.	
LEGAL REPRESENTATIVE:	Flynn, Thiel, Boutell & Tanis	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 6 Drawing Page(s)	
LINE COUNT:	1977	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . compounds obtained by treating a waste liquor formed as a
by-product in the production of pulp and which mainly comprise
ligninsulfonates or **ligninsulfonic acid**.

L3 ANSWER 3 OF 4 USPATFULL

ACCESSION NUMBER: 75:36606 USPATFULL
TITLE: Production of foamed porous shaped structures of lignin suited for carbonization
INVENTOR(S): Mansmann, Manfred, Krefeld, Germany, Federal Republic of
Winter, Gerhard, Krefeld, Germany, Federal Republic of
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 3894878		19750715
APPLICATION INFO.:	US 1972-243054		19720411 (5)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1971-2118487	19710416
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Schofer, Joseph L.	
ASSISTANT EXAMINER:	Michl, P. R.	
LEGAL REPRESENTATIVE:	Burgess, Dinklage & Sprung	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
LINE COUNT:	355	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . mannose, xylose and arabinose) as well as acetic acid, furfural, hydroxymethylfurfural and aromatic substances. Equally Na, NH.sub.4, Mg and Ca **ligninsulfonates** or **ligninsulfonic acid**, which have been purified, e.g. freed of carbohydrates by fermentation or treatment with yeast, can be used. Equally, the potassium, . . .

SUMM . . . foamed carbon articles which are as free as possible of cations it is possible conveniently to begin by converting any **ligninsulfonate** solution into the free **ligninsulfonic acid** by reaction with cation exchangers in the H.sup.+ form. Contaminations due to contained sugar do not interfere.

L3 ANSWER 4 OF 4 USPATFULL

ACCESSION NUMBER: 74:9474 USPATFULL
TITLE: METHOD OF TREATING WASTE WATER CONTAINING LIGNINSULFONATE
INVENTOR(S): Ichiki, Minoru, Tokyo, Japan
Ishii, Masahito, Tokyo, Japan
PATENT ASSIGNEE(S): Mitsui Mining & Smelting Co., Ltd., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 3793174		19740219
APPLICATION INFO.:	US 1972-286713		19720906 (5)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1971-69977	19710909
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Mack, John H.	
ASSISTANT EXAMINER:	Prescott, A. C.	
LEGAL REPRESENTATIVE:	Woodhams, Blanchard & Flynn	
NUMBER OF CLAIMS:	2	
LINE COUNT:	187	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CLM What is claimed is:

2. A process of treating the waste water containing ligninsulfonate according to claim 1, wherein said **ligninsulfonate** is the sodium salt, potassium salt, or calcium salt of **ligninsulfonic acid**.

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=> e PRIMAKOFF p/in
'IN' IS NOT A VALID EXPAND FIELD CODE FOR FILE 'RDISCLOSURE'
E1      1      PRIMAK WILLIAM L/IN
E2      4      PRIMAKOFF/IN
E3      0 --> PRIMAKOFF P/IN
E4      3      PRIMAKOFF PAUL/IN
E5      1      PRIMAKOFF PAUL WEST SIMSBURY CT 06092 US/IN
E6      2      PRIMAL/IN
E7      1      PRIMALDO/IN
E8      1      PRIMARETTE/IN
E9      2      PRIMARIA/IN
E10     2      PRIMARIUS/IN
E11     1      PRIMAROSA/IN
E12     1      PRIMARY/IN
The indicated field code is not available for EXPAND in this
file.  To see a list of valid EXPAND field codes, enter HELP
SFIELDS at an arrow prompt (=>).
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=> s e4-e5
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